### **Comparisons of Job Characteristics**

Focus Occupation: Industrial Machinery Mechanics (49-9041)

**Associated Occupation: Automotive Service Technicians and Mechanics (49-3023)** 

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

### Knowledge

Similarity of Focus Occupation to Associated Occupation: 74

Focus Occupation: Industrial Machinery Mechanics (49-9041)

Associated Occupation: Automotive Service Technicians and Mechanics (49-3023)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Mechanical	6.8	20.8	20.1	0	Current knowledge level may be sufficient
Customer and Personal Service	11.3	15.1	3.9	<<	Extensive education and/or training may be required
Engineering and Technology	5.7	12.9	13.0	0	Current knowledge level may be sufficient
Physics	4.3	8.6	7.4	<	Expanded education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Skills**

Similarity of Focus Occupation to Associated Occupation: 91

Focus Occupation: Industrial Machinery Mechanics (49-9041)

Associated Occupation: Automotive Service Technicians and Mechanics (49-3023)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Repairing	3.4	12.7	15.6	>	Skill level is likely sufficient	
Equipment Maintenance	3.5	11.6	14.6	>	Skill level is likely sufficient	
Troubleshooting	4.5	11.4	13.6	>	Skill level is likely sufficient	
Operation and Control	5.4	11.1	11.6	0	Current skill level may be sufficient	
Operation Monitoring	6.6	10.9	14.2	>>	Skill level is likely more than sufficient	
Quality Control Analysis	5.9	10.4	12.3	>	Skill level is likely sufficient	
Equipment Selection	3.3	9.4	9.8	0	Current skill level may be sufficient	
Installation	1.7	6.4	6.4	0	Current skill level may be sufficient	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

### **Abilities**

#### Similarity of Focus Occupation to Associated Occupation: 89

Focus Occupation: Industrial Machinery Mechanics (49-9041)

Associated Occupation: Automotive Service Technicians and Mechanics (49-3023)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Extent Flexibility	4.8	14.4	10.3	<<	Extensive improvement in abilities may be required	
Control Precision	6.6	13.5	12.9	0	Current ability level may be sufficient	
Finger Dexterity	7.6	12.6	11.9	0	Current ability level may be sufficient	
Manual Dexterity	6.5	12.4	12.6	0	Current ability level may be sufficient	
Arm-Hand Steadiness	6.8	12.2	11.4	0	Current ability level may be sufficient	
Multilimb Coordination	6.0	12.0	11.5	0	Current ability level may be sufficient	
Hearing Sensitivity	5.6	11.8	12.1	0	Current ability level may be sufficient	
Auditory Attention	5.9	10.6	11.2	0	Current ability level may be sufficient	
Sound Localization	2.2	5.9	6.5	>	Current ability level is likely sufficient	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## **Activities that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 79

Focus Occupation: Industrial Machinery Mechanics (49-9041)
Associated Occupation: Automotive Service Technicians and Mechanics (49-3023)

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12
Align or adjust clearances of mechanical components or parts	72
Assemble, dismantle, or reassemble equipment or machinery	70
Conduct tests to locate mechanical system malfunction	71
Determine installation, service, or repair needed	58
Diagnose mechanical problems in machinery or equipment	65
Fabricate, assemble, or disassemble manufactured products by hand	11
Identify base metals for welding	68
Identify properties of metals for repair or fabrication activities	71
Inspect machinery or equipment to determine adjustments or repairs needed	42
Install electronic equipment, components, or systems	62
Lubricate machinery, equipment, or parts	59
Maintain repair records	65
Maintain welding machines or equipment	70
Move or fit heavy objects	8

Operate hoist, winch, or hydraulic boom	34
Perform safety inspections in industrial, manufacturing or repair setting	32
Read schematics	34
Read technical drawings	7
Read work order, instructions, formulas, or processing charts	9
Repair or replace electrical wiring, circuits, fixtures, or equipment	49
Repair or replace malfunctioning or worn mechanical components	62
Set up and operate variety of machine tools	62
Test electrical/electronic wiring, equipment, systems or fixtures	54
Test mechanical products or equipment	56
Understand service or repair manuals	40
Understand technical operating, service or repair manuals	6
Use acetylene welding/cutting torch	54
Use combination welding procedures	68
Use electrical or electronic test devices or equipment	40
Use electronic calibration devices	68
Use hand or power tools	2
Use knowledge of metric system	39
Use knowledge of welding filler rod types	75
Use machine tools in installation, maintenance, or repair	72
Use pneumatic tools	66
Use precision measuring devices in mechanical repair work	61
Use soldering equipment	44
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

# **Tools and Technologies that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 84

Focus Occupation: Industrial Machinery Mechanics (49-9041)
Associated Occupation: Automotive Service Technicians and Mechanics (49-3023)

Tools and Technologies	Exclusivity
Bandsaws and accessories	26
Business function specific software	1
Cleaning equipment	11
Compressors	9
Computer printers	2
Computers	1
Cutting and crimping and punching tools	3
Cutting tools	18
Data management and query software	1
Dispensing tools	6
Electrical measuring and testing equipment	7
Face and head protection	7

Fastener setting tools	12
Forming tools	2
Gas analyzers and monitors	10
Holding and clamping tools	3
Indicating and recording instruments	2
Industrial trucks	10
Industry specific software	1
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Measuring and layout tools	3
Mechanical instruments	14
Metal bending and forming machinery	17
Metals and metallurgy and structural materials testing instruments	15
Pneumatic tools	8
Power tools	2
Pressure measuring and control instruments	10
Prying and bending tools	10
Pumps	9
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Tool attachments and accessories	12
Transportation related equipment and instruments	29
Viewing and observing instruments and accessories	4
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of  $O^*NET$  (Occupation Information Network) data.